Committee on Earth Observation Satellites 17th Plenary Meeting Colorado Springs, Colorado November 19-20, 2003 CEOS/17/WgEdu

Item 11.2

Submitted by Sergio Camacho Chair, CEOS ad hoc Working Group on Earth Observation Education and Training

Draft Principles of Satellite Data Provision in Support of Earth Observation Education and Training

SUMMARY AND PURPOSE

The CEOS ad hoc Working Group on Education and Training in Earth Observation (WGEdu) has prepared a set of draft data principles for education, training and capacity building purposes. The text of the draft principles is contained in the attached document. If adopted by CEOS Plenary, the draft data principles would encourage that satellite operators provide limited amounts of data or data sets, on a voluntary basis and consistent with agency data policies, for specific education and training data requests received from recognized capacity building institutions, particularly in the developing countries.

ACTION PROPOSED

CEOS Plenary is invited to review/modify and approve the draft data principles and to encourage Members to provide data and data sets for capacity building, particularly in developing countries. For specific actions that could be taken in 2004 to apply the spirit of the draft principles, CEOS Plenary may wish to consider the draft ad hoc implementation guidelines presented in a separate supplemental document proposed by the WGEdu. In particular, CEOS Plenary is invited to:

- 1. Review/modify and approve the draft data principles; and
- 2. Agree that application or execution of the data principles could begin as of 2004.

Draft principles for satellite data provision in support of education, training and capacity building

Submitted by the CEOS *ad hoc* Working Group on Education and Training in Earth observation for approval by the 17th CEOS Plenary

Introduction

The CEOS *ad hoc* Working Group on Education and Training in Earth observation (WGEdu) strategy for Earth observation education and training notes that it is important to deliver the requisite data, analysis information products and applications to operational managers, policy-and decision-makers and other non-traditional users of these products. It further notes that these benefits have not been realized in a large number of countries due to the lack of trained research and applications personnel.

The WGEdu identified a number of obstacles to capacity building in the developing countries. A main obstacle is the insufficient awareness of decision-makers of the value of using Earth observation for policy- and decision-making and its cost-effectiveness as an operational tool to implement their work programmes. Other obstacles are insufficient numbers of well-prepared and well-equipped educators of Earth observation and its applications, and needs of various kinds of educational resources. The needs include hardware, software, Earth Observation and in-situ data, experience in Earth observation applications as well as education and training materials.

To address the issue of Earth Observation data availability, the WGEdu worked for more than a year on a draft set of data principles to support the provision of Earth observation satellite data for education, training and capacity building purposes (not research or operational uses). The text of these draft data principles was developed on the basis of informal consultations with CEOS Members and Associates. On 11 August 2003, the CEOS and the WGEdu Chairs issued a joint invitation to Members and Associates to participate in a Meeting to finalize the text of the draft data principles with a view to presenting the final version to the 17th CEOS Plenary for its consideration and adoption. CEOS Principals were invited to send representatives to the Meeting or, if not possible, to provide comments, questions or concerns to the WGEdu prior to the Meeting. The Meeting was held at Vienna on 12 September 2003.

The draft data principles that the WGEdu is proposing to CEOS Plenary for adoption are the following:

- > CEOS agencies commit to the following set of principles on data provision in support of Earth observation education, training and capacity building and will implement them to the fullest extent possible, within available resources and consistent with agency data policies:
 - 1) CEOS agencies should endeavour to provide on a sustainable basis comprehensive and complete data sets for education, training and capacity building purposes.
 - 2) When making data available for education, training and capacity purposes CEOS agencies should strive to adhere to the satellite data exchange principles in support of global change research (1992)¹ and principles on satellite data provision in support of operational environmental use for the public benefit (1994)² as previously adopted by CEOS.

¹ http://www.ceos.org/pages/satellite_1.html

² http://www.ceos.org/pages/satellite_2.html

- 3) CEOS agencies should provide access to data at the lowest possible cost and on a non-discriminatory basis.
- 4) CEOS agencies should provide easy and timely access to their data and information which are to be used for Earth observation education and training. This access can be through individual agencies' distribution mechanisms or through mechanisms developed by CEOS, such as WSSD follow-up Programme.

A consideration that is central in the above draft principles is that data to be provided by any CEOS Member would be on a voluntary basis and fully in accordance with its data policy. The WGEdu also recognized that Earth observation data to be provided under the principles would be in limited or reasonable amounts to support well-defined education and capacity building activities that are carried out by bona fide institutions. Through a selective application process, the WGEdu would contribute to ensure that only serious and well-defined requests for data reach the satellite operators. While additional time is required to develop a mechanism for this purpose, to make it possible that data could begin to reach developing countries in 2004, the WGEdu is recommending that the draft principles be adopted together with a set of *ad hoc* guidelines for data provision. Possible *ad hoc* guidelines are presented in the supplemental document titled "Draft *Ad hoc* Guidelines for providing Earth Observation data for Education and Capacity Building".

If adopted, the data principles would represent a statement of the importance placed by CEOS on the need for sustained education, training and capacity building in the use of Earth Observation data, particularly in developing countries.

A key consideration in these draft principles is that data provision, by any CEOS Member would be on a voluntary basis and fully in accordance with their data policy. The WGEdu also recognized these data would need to be in limited or reasonable qualities to support well-defined education and capacity building activities that are carried out by bona fide institutions. The data providers would be asked to provide data, through a selective application process defined and facilitated by the WGEdu, and would contribute to only serious and well-defined requests. While additional time is required to develop a mechanism for this purpose, in order to make it possible that data could begin to reach developing countries in 2004, the WGEdu is proposing that the draft principles be adopted and that CEOS Plenary provide guidance as to how this may be achieved. For this purpose, a recommended set of *ad hoc* guidelines have been provided in the supplemental document titled "Draft *Ad hoc* Guidelines for providing Earth Observation data for Education and Capacity Building".

If adopted, the data principles would represent a statement of the importance placed by CEOS on the need for sustained education, training and capacity building in the use of Earth Observation data, particularly in developing countries.